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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,008	10/24/2003	Alex C. Toy	1023-287US01	9358
28863	7590	11/22/2005		
SHUMAKER & SIEFFERT, P. A. 8425 SEASONS PARKWAY SUITE 105 ST. PAUL, MN 55125				
			EXAMINER KAHELIN, MICHAEL WILLIAM	
			ART UNIT 3762	PAPER NUMBER

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,008

Applicant(s)

TOY ET AL.

Examiner

Michael Kahelin

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3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09062005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 11/7/2005. These drawings are accepted.

Specification

2. The amendments to the specification are acknowledged and accepted.

Claim Objections

3. The amendment to the claims is acknowledged and accepted.

Response to Arguments

4. Applicant's arguments filed 11/7/2005 have been fully considered but they are not persuasive. With respect to claims 1, 12, 28, and 32, Applicant argued that the Lebel reference fails to anticipate the claims because Lebel disables the display backlight and not the display. However, in its "broadest reasonable interpretation", Examiner contends that Lebel's display includes the backlight because it too provides visual information to the user. Additionally, Applicant discloses in paragraph [0073] of the disclosure that, "display 28 may include an LCD module with an LCD lighting source." Furthermore, Examiner continues to contend that turning the backlight on constitutes enabling the display and turning the backlight off constitutes disabling the

display because when the backlight is on, the display is able to display light and when the backlight is off, the display is not able to display light.

5. With respect to claim 24, Applicant argued that Lebel does not disclose disabling the display during communication via the telemetry circuit. However, the “RF quiet signal” that disables the display in Lebel’s invention is asserted during RF reception (telemetry) (par. 0254).

6. With respect to claims 2-11, 13-23, 25-27, and 29-31, Applicant argued that the display is not enabled after telemetry, but only the backlight. The response to this argument, on the same grounds, is provided above of this document.

7. With respect to claims 6, 7, 9, 11, 17, 18, 20, 21, 27, and 31, Applicant argued that Lebel in view of Stanton does not render the claims obvious because Lebel does not disable a display during telemetry and Stanton does not teach of disabling a display when using an internal antenna and enabling the display when using an external antenna. The argument of Lebel not disabling a display is addressed above. Examiner contends that it would be obvious to combine the teaching of Stanton with Lebel. Lebel discloses that the motivation for disabling the display is to avoid noise during RF reception (par. 0254), and Stanton teaches of providing an internal and external antenna to allow viewing of the display when the antenna is in contact with the body. It has been held that omission of an element and its function is obvious if the function of the element is not desired (see: *Ex Parte Wu*, 10 USPQ 2031 or MPEP 2144.04 (II)). Therefore, when the external antenna is connected, electromagnetic interference from

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the display is negligible, and it would therefore be obvious to omit the display-disabling feature because the display-disabling function is not desired.

8. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the general argument that Stanton does not provide the motivation to combine the two references is not moving because it is not required that Stanton provide the motivation, but only that there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

9. In response to the argument that claims 9 and 20 are unobvious over Lebel because Lebel fails to disclose any structural relationship between the respective boards and modules, Examiner directs Applicant's attention to paragraph 0193. Here, Lebel discloses that the modules, including front-end telemetry circuitry and the display circuitry, can be combined in any combination, including individually. In addition, it is within the abilities of a skilled artisan to place circuits on any number of interconnected boards to fit the volumetric constraints of a device housing.

10. In regards to claim 10, Applicant argued that the Stein reference failed to define a battery bay extending into the aperture of the coil. Although the view in Figure 9 of

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Stein's publication is an exploded view, it is plain to see that the battery contacts (77) will project into the antenna aperture defined by element 66. This will inherently place batteries (76) in the aperture as well. Alternatively, Examiner is interpreting "battery bay" in its broadest reasonable interpretation as the void defined by the unlabeled cutout near element 77 and the two casing portions (36), which also extends into the aperture. In response to the argument that Stein does not provide the motivation of increased inductance or efficient utilization of housing volume, Examiner contends that these motivations are notoriously well known to skilled artisans and, therefore, are not required to be taught by Stein. A skilled artisan will realize that efficient utilization of housing volume will require less material and lower manufacturing costs.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-5, 8, 12-16, 22-26, 28-30, and 32 are rejected under 35 U.S.C. 102(a) as being anticipated by Lebel et al. (2003/0065308).

3. In regards to claims 1 and 2, Lebel et al. disclose a medical device programmer having telemetry circuitry and a display with display circuitry that is disabled during the activation of the telemetry circuitry to reduce electrical interference (par. 0257).

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4. In regards to claims 4, 5, 12, 13, 15, 16, 22, 23, 24, 25, 26, 28, 29, 30, and 32, the display is enabled when the telemetry is not activated (par. 0257), the medical device is a neurostimulator (par. 0091), handheld (par. 0115), and includes an internal antenna to transmit and process received signals from the implant (par. 0216).

In regards to claim 8, the display is an LCD device (par. 0067). Please note that the examiner is interpreting enabled as lit and disabled as not lit.

5. Claims 3 and 14 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Lebel et al. It is inherent that an LCD display would reside on a circuit board because these devices are not flexible and require underlying electrical connections. Therefore, the circuit resides on a rigid structure (or board) with circuitry that drives the display. Or in the alternative, the examiner hereby takes Official Notice that it is well known in the art that circuit components, including LCD displays, are typically connected to circuit boards by soldering or other means to provide a stable means to connect circuit components. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to connect the display to a circuit board to provide a stable means to connect circuit components.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 6, 7, 9, 17-21, 27, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel et al. in view of Stanton et al. (6,249,703 B1). Lebel et al disclose the invention substantially as claimed except for providing an internal and external antenna wherein the display is enabled while the external antenna is in use and disabled when the internal antenna is in use; and placing the communication circuitry on a first circuit board and the display on a second. Stanton et al. teach of a programmer for an implantable device that comprises an internal antenna and a removable external antenna so that the main body of the programmer can be seen and operated while the antenna is in contact with the body. Therefore it would have been obvious to someone with ordinary skill in the art at the time of invention to provide Lebel et al.'s invention with an internal and external antenna so that the main body of the programmer can be seen and operated while the antenna is in contact with the body.

9. Furthermore, it is well known to those with ordinary skill in the art that the electromagnetic interference emitted from an LCD display is negligible at distances larger than a few millimeters. Therefore, it would be obvious to disable the display when using the internal antenna and enable the display when using the external antenna to provide maximum visibility to the user while minimizing EMI.

10. In regards to claims 9 and 20, Lebel et al. disclose that their invention can consist of several hybrid circuit boards (par. 0191) and a number of modules, including the ASIC and LCD display and drivers (par. 0197), to fit the particular design constraints. Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to place the telemetry circuit on a first circuit board and the display circuitry on another, based on the teaching of Lebel et al. to fit volumetric design constraints. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lebel et al. in view of Stanton et al. as applied to claims 6, 7, 9, 17-21, 27, and 31 above, and further in view of Stein et al. Lebel et al. in view of Stanton et al. teach of the invention essentially as claimed except for an antenna defining an aperture with a battery bay extending into the aperture. Stein et al. teach of an antenna (Fig. 9, element 66) with a battery bay (Fig. 9, element 86) in the aperture to increase the inductance of the antenna and efficiently utilize the housing volume. Therefore, it would have been obvious to someone with ordinary skill in art at the time of invention to provide Lebel et al. in view of Stanton et al.'s teaching with an antenna with a battery bay in the aperture to increase the inductance of the antenna and efficiently utilize the housing volume.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571) 272-8688. The examiner can normally be reached on M-F, 9-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MWK

A handwritten signature in black ink, appearing to be 'MD' followed by a stylized surname.


GEORGE R. EVANISKO
PRIMARY EXAMINER
11/2/15